

WHAT IS CLAIMED IS:

1. A concentrated phosphorus fertilizer comprising a buffered composition comprising an organic acid and salts thereof and a phosphorous-containing acid and salts thereof, such that when said composition is diluted
5 with water, there is formed a substantially fully solubilized use-dilution fertilizer having a foliage-acceptable pH for phosphorus uptake.
2. The phosphorus fertilizer of claim 1 wherein said phosphorous-containing acid is selected from the group consisting of phosphorous acid, hypophosphorous acid, polyphosphorous acid, and polyhypophosphorous
10 acid.
3. The phosphorus fertilizer of claim 1 wherein said organic acid is selected from the group consisting of dicarboxylic acids and tricarboxylic acids.
4. The phosphorus fertilizer of claim 3 wherein said organic acid is
15 citrate.
5. The phosphorus fertilizer of claim 1 wherein said use-dilution fertilizer has a pH of about 5.0 to about 7.0.
6. The phosphorus fertilizer of claim 1 wherein said use-dilution fertilizer has a pH of about 5.5 to about 6.5.
7. The phosphorus fertilizer of claim 1 wherein said water has a pH of
20 about 6.5 to about 8.5.
8. The phosphorus fertilizer of claim 1 that is essentially clear and devoid of precipitate.
9. The phosphorus fertilizer of claim 1 wherein said use-dilution fertilizer
25 comprises a ratio of said concentrated phosphorus fertilizer to said water of

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out 1:600.

phorus fertilizer of claim 14 wherein the phosphorous present in an amount

of about 1% by weight of the fertilizer comprises:

(a) a phosphorous source comprising an organic acid and salts thereof, and

(b) water, the mixture having a pH for phosphorous fertilization acceptable for phosphorous fertilization.

The method of providing phosphorous fertilizer comprising a buffered composition comprising a phosphorous-containing compound having a pH less than about 7.0, and a phosphorous fertilizer of claim 14.

The method of providing phosphorous fertilizer comprising a phosphorous fertilizer comprising an organic acid and salts thereof with water to form a solution having a foliage-acceptable pH, and a dilution fertilizer to the solution.

The method of claim 14 wherein the phosphorous group consisting of phosphorous, phosphorous acid, and polyphosphoric acid.

The method of claim 14 wherein the phosphorous group consists of dicarboxylic acids and salts thereof.

10. The phosphorus fertilizer of claim 1 wherein said phosphorus-containing acid is present in an amount of about 30 to about 40 weight percent.
- 5 11. A concentrated phosphorus fertilizer comprising a buffered composition comprising an organic acid and salts thereof, a phosphorous-containing acid and salts thereof, and copper, such that when said composition is diluted with water, there is formed a use-dilution fertilizer having a foliage-acceptable pH for phosphorus uptake.
- 10 12. A concentrated phosphorus fertilizer for irrigation application, said fertilizer comprising a buffered composition comprising an organic acid and salts thereof and a phosphorous-containing acid and salts thereof, said composition having a pH less than about 2.5.
- 15 13. The phosphorus fertilizer of claim 12 having a pH of less than about 1.5.
14. A method of providing phosphorus to a plant comprising diluting a concentrated phosphorus fertilizer comprising a buffered composition comprising an organic acid and salts thereof and a phosphorous-containing acid and salts thereof with water to form a substantially fully solubilized use-dilution fertilizer having a foliage-acceptable pH for phosphorus uptake, and applying said use-dilution fertilizer to the foliage of said plant.
- 20 15. The method of claim 14 wherein said phosphorous-containing acid is selected from the group consisting of phosphorous acid, hypophosphorous acid, polyphosphorous acid, and polyhypophosphorous acid.
- 25 16. The method of claim 14 wherein said organic acid is selected from the group consisting of dicarboxylic acids and tricarboxylic acids.

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